

REMARKS/ARGUMENTS

This Amendment is in response to the Final Office Action mailed June 11, 2008.

Claims 1-70 were pending in the present application and stand rejected.

No claims have been amended. Claims 1-70 remain pending in this application after entry of this amendment.

Reconsideration of the rejections is requested in view of the remarks below.

THE CLAIMS

Rejections under 35 U.S.C. 103

Claims 1-15, 18, 20-44, 46-48, 50-62 and 64-70

Claims 1-15, 18, 20-44, 46-48, 50-62 and 64-70 are rejected under 35 U.S.C. §103(a) as being unpatentable over Maher, III et al (U.S. Patent No. 6,654,373) (hereinafter "Maher") in view of Scholten (U.S. Patent No. 7,126,956) (hereinafter "Scholten"). Applicant respectfully traverses the rejections.

Claim 1

Applicant submits that claim 1 is not taught or suggested by Maher or Scholten, considered individually or in combination. For example, Applicant's claim 1 recites:

1. A circuit for aggregating a plurality of input data streams from first processors into one data stream for a second processor, said circuit comprising:

a plurality of ingress data ports, each said ingress data port coupled to a corresponding first processor and adapted to receive an input data stream from the corresponding first processor . . . ;

an aggregation module coupled to said plurality of ingress data ports and configured to receive the input data streams from the first processor using the plurality of ingress data ports, said aggregation module adapted to analyze and combine the plurality of input data streams into one aggregated data stream . . . ;

a memory coupled to said aggregation module, said memory adapted to store analyzed data packets; and

an output data port coupled to said aggregation module, said output data port adapted to output the aggregated data stream to the second processor. (Applicant's claim 1, in part, emphasis added)

As recited above, claim 1 recites a circuit for aggregating a plurality of input data streams from first processors into one data stream for a second processor. As recited in claim 1, circuit includes an aggregation module that receives several input data streams from a plurality of ingress data ports. Accordingly, the aggregation module receives multiple input streams from a plurality of input ports. The aggregation module further analyzes and combines the plurality of input data streams into one aggregated data stream, which is then output to a second processor via an output data port coupled to the aggregation module. A memory is also coupled to the aggregation module for storing the analyzed data packets.

Additionally, claim 1 also recites a specific structure with respect to the ingress data ports. As recited in claim 1, each ingress data port is coupled to a corresponding first processor. Applicant submits that this structure of the circuit recited in claim 1 is not taught or suggested by Maher or Scholten, considered individually or in combination.

The Office Action asserts that several of the elements of claim 1 are taught by Maher. For example, the Office Action asserts that the aggregation module of claim 1 integrated adapter taught by reference 140 in Fig. 2 of Maher. Applicant respectfully disagrees. Claim 1 specifically recites that the aggregation module is coupled to a plurality of ingress data ports and receives multiple input data streams via the plurality of ingress data ports. This is not done by reference 40 depicted in Fig. 2 of Maher. Reference 140 in Fig. 2 of Maher refers to a traffic flow scanning processor that receives data over a single fast-path bus 126 from PHY interface 102 (Maher: Fig. 2 and col. 6 lines 11-14). Accordingly, traffic flow scanning processor 140 receives a single data stream via a single bus and is thus coupled via a single port to PHY interface 102. This is different from claim 1, wherein the aggregation module is coupled to a plurality of ingress data ports and receives multiple data streams. While the single data stream received by traffic flow scanning processor 140 in Maher may contain data received over multiple ports of network apparatus 100 depicted in Maher Fig. 2, the traffic flow scanning

processor 140 itself is not coupled to multiple input data ports and does not receive multiple input data streams, as recited in claim 1. Accordingly, Applicant submits that reference 140 depicted in Fig. 2 of Maher does not teach or anticipate the aggregation module recited in claim 1.

Further, with respect to the specific structure recited in claim 1, the Office Action acknowledges that

... Maher does not teach [that] each data port is coupled to a corresponding processor and receives data from its corresponding processor, and an aggregating module receives the input data streams from the first processors using the plurality of ingress data ports. (Office Action: page 5).

The Office Action however goes on to assert that

Scholten teach each data port is coupled to a corresponding processor and receives data from its corresponding processor, and an aggregation module receives the input data streams from the first processors using the plurality of ingress data ports [Col. 7, lines 47-49] (Office Action: page 5)

Applicant respectfully disagrees. Applicant submits that the first processors and the aggregation module recited in claim 1 cannot be considered in isolation. As described above, Applicant submits that an aggregation module as recited in claim 1 is not taught by Maher. Applicant submits that the deficiencies of Maher are not cured by Scholten. Scholten thus fails to teach or suggest an aggregation module as recited in claim 1. Consequently, the specific structure recited in claim 1 of an aggregation module coupled to a plurality of ingress data ports and receiving multiple data streams from the input ports and each ingress data port coupled to a corresponding first processor and adapted to receive an input data stream from the corresponding processor is also not taught or suggested by Scholten.

Further, as recited in claim 1, the each ingress data port receives data from its corresponding first processor. This is also not taught by Scholten. Col. 7 lines 47-49 of Scholten (identified by the Office Action) describe:

The plurality of transmit data FIFOs 310 receive data from one of the plurality of the ingress data processors 314, each of which is coupled to a particular input port 303. The ingress data processors 314 receives data from the corresponding input port 303 and formats the data into

one or more data packets, wherein each data packet includes at least a destination identifier portion and data portion. (Scholten: col. 7 lines 45-47)

As is evident from the above, in Scholten, the ingress data processors 314 receive data from the corresponding input ports 303 -- the input ports 303 do not receive data from the corresponding processor. Accordingly, the structure described in the cited portion of Scholten is different from the structure recited in claim 1 wherein each ingress data port (not the first processor) is adapted to receive an input data stream from its corresponding first processor. Applicant thus submits that this feature of claim 1 is not taught or suggested by Scholten.

Applicant thus submits that even if Maher and Scholten were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not teach or suggest the circuit recited in claim 1. Applicant thus submits that claim 1 is allowable over a combination of Maher and Scholten.

In light of the above, Applicant thus submits that claim 1 is patentable over a combination of Maher and Scholten.

Applicant further submits that dependent claims 2-15 that depend either directly or indirectly from claim 1 are also not rendered obvious by a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 1. Applicant submits that the dependent claims are also patentable for additional reasons.

Claim 18

Applicant submits that claim 18 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 1.

Claims 20-30

In addition to other features, Applicant's claim 20 specifically recites:

20. A circuit for aggregating an input data stream from a first processor into an aggregated data stream for a second processor, said circuit comprising:
an ingress data port adapted to receive the input data stream from the first processor via a

first data link having a first bandwidth, the input data stream formed of ingress data packets, each ingress data packet including priority factors coded therein;

an aggregation module coupled to said ingress data port, said aggregation module adapted to analyze and selectively recombine the ingress data packets in response to the priority factors so as to generate an aggregated data stream for a second data link having a second bandwidth smaller than the first bandwidth;

...
an output data port coupled to said aggregation module, said output data port adapted to output the aggregated data stream to the second processor using the second data link (Applicant's claim 20, in part, emphasis added)

As recited above, claim 20 specifically recites a circuit having a specific structure in which an input data stream is received from the first processor via a first data link having a first bandwidth and the aggregation module generates an aggregated data stream for a second data link having a second bandwidth smaller than the first bandwidth. The aggregation module thus receives the input data stream via a first data link having the first bandwidth and generates an aggregated data stream for a second data link having a second bandwidth smaller than the first bandwidth, the second data link is used to output the aggregated data stream to the second processor. Applicant submits that at least this feature recited in claim 20 is not rendered obvious by a combination of Maher and Scholten.

The Office Action acknowledges that Maher does not teach generating an aggregated data stream for a second data link having a second bandwidth smaller than the first bandwidth of a first data link where an ingress data port receives the input data stream from a first processor via the first data link and an output data port coupled to the aggregation module is adapted to output the aggregated data stream to the second processor (Office Action: page 9). The Office Action however alleges that this feature of claim 20 is taught by Scholten at col. 3 lines 47-55, Fig. 3 references 314 and 316, col. 1 lines 53-57, and col. 8 lines 38-50. Applicant respectfully disagrees.

Applicant submits that the various sections of Scholten cited by the Office Action fail to cure the deficiencies of Maher. For example, col. 3 lines 47-55 of Scholten describe that an aggregation module 102 (depicted in Fig. 1 of Scholten) that receives lower bandwidth data

packets from the plurality of input-output ports and outputs a higher bandwidth data signal for transmission via the high capacity network 104. Applicant however submits that this is completely different from what is claimed in claim 20. As recited in claim 20, the bandwidth of the second data link used to output the aggregated data stream from the aggregation module to the second processor is smaller than the first bandwidth of the first data link over which the input data stream is received by the ingress port from the first processor -- in this manner data streams are aggregated from a higher bandwidth data link to a lower bandwidth data link. This is completely different from what is described in col. 3 lines 47-55 of Scholten wherein data packets are aggregated from lower bandwidth data packets received from the plurality of input-output ports into a higher bandwidth data signal.

The description (pointed out by Examiner in the "Response to Arguments" section) in Scholten that:

... the sum of the aggregated bandwidths of the data provided by the plurality of input-output ports 101, is less than or equal to the 10 GBPS data rate of the PSTN. (Scholten: col. 3 lines 52-55)

further emphasizes Applicant's arguments made above. This clearly shows that the bandwidths of data received by the aggregation module in Scholten are lower than the bandwidth on network 104 (PSTN). This shows that in Scholten the aggregation module 102 receives lower bandwidth data packets from the plurality of input-output ports and outputs a higher bandwidth data signal for transmission via the high capacity network 104 -- this is different from what is recited in claim 20.

References 314 and 316 in Fig. 3 of Scholten point to ingress and egress data processors respectively with ports 303 and 315 coupled to the processors. With respect to Fig. 3 in Scholten, Examiner has not clearly articulated which data links in Fig. 3 of Scholten correspond to the first data link and the second data link recited in claim 20. Further, the Office Action fails to show which component in Fig. 3 of Scholten corresponds to the aggregation module as recited in claim 20. Due to the above and as best understood by the Applicant, Fig. 3 of Scholten fails to show that a bandwidth of a second data link used to output the aggregated data stream from the aggregation module to the second processor is smaller than the first

bandwidth of the first data link over which the input data stream is received by the ingress port, as recited in claim 20. Accordingly, Applicant submits that claim 20 is not taught by Fig. 3 of Scholten.

Applicant further submits that, col. 8 lines 38-50 of Scholten also merely provide description related to the input and output ports depicted in Fig. 3. Further, col. 1 lines 53-57 generally describe the advantages of providing fractional portions of high bandwidth capacity links. Applicant submits that, as discussed above for Fig. 3 of Scholten, these portions of Scholten also fail to teach the specific features recited in claim 20.

Applicant thus submits that the deficiencies of Maher are not cured by Scholten. Applicant thus submits that even if Maher and Scholten were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not teach or suggest the circuit recited in claim 20. Applicant thus submits that claim 20 is allowable over a combination of Maher and Scholten.

Applicant further submits that the dependent claims 21-30 that depend either directly or indirectly from claim 20 are also not rendered obvious by a combination of Maher and Scholten for at least a similar rationale discussed above for claim 20. Applicant submits that the dependent claims are patentable for additional reasons.

Claim 31

In addition to other features, claim 31 recites:

an egress data input port adapted to receive the aggregated input data stream from the second processor via a first data link having a first bandwidth, the aggregated data stream formed of egress data packets;

a plurality of egress data output ports, each said egress data port adapted to output an output data stream to a corresponding one of the first processors via a second data link having a bandwidth greater than the first bandwidth;

a forwarding module coupled between said egress data input port and said egress data output ports, said forwarding module adapted to forward an egress data packet in the data stream from the second processor to one of the egress data output ports in response to

destination information associated with each egress data packet. (Applicants claim 21 in part, emphasis added)

As recited above, the circuit recited in claim 31 comprises a specific structure comprising several elements including an egress data input port, second processor, first data link, plurality of egress data output ports, first processor, a data link having a greater bandwidth than the first data link, and a forwarding module. Further, within the specific structure recited in claim 31, the aggregated input data stream is received from the second processor via a first data link having a first bandwidth and an output data stream is output to a first processor via a data link having a bandwidth greater than the first bandwidth. Applicant submits that at least these concepts recited in claim 31 are not taught or suggested by Maher, or Scholten, considered individually or in combination.

The Office Action acknowledges that Maher does not teach the bandwidth-related features recited in claim 31 (Office Action: page 11). However, the Office Action asserts that these features of claim 31 are taught by Scholten at col. 8 lines 1-6, Fig. 3, references 314 and 316, col. 8 lines 1-7, and col. 8 lines 38-50. Applicant respectfully disagrees.

Applicant submits that the bandwidth features recited in claim 31 cannot be considered in isolation of the structural elements of claim 31 since the bandwidth features are for links within a specific structure as recited by claim 31. Scholten fails to teach the specific structure recited in claim 21 or anything even close to the structure recited in claim 31. Further, it is unclear whether Scholten even teaches the bandwidth related features of claim 31 since it is not clear from the Office Action as to what in Scholten the Office Action considers as the first data link having a first bandwidth and a second data link having a bandwidth greater than the first bandwidth as recited in claim 31. Col. 8 lines 1-6 of Scholten describes dropping and adding data to a link layer device, but it is unclear how this relates to receiving data via a port using a lower bandwidth data link and forwarding data to multiple egress data output ports with links having a higher bandwidth, as recited in claim 31. Accordingly, Applicant submits that even if Maher and Scholten were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not teach or

suggest the circuit recited in claim 31. Applicant thus submits that claim 31 is allowable over a combination of Maher and Scholten.

Claims 32-44

Applicant submits that claim 32 is not taught or suggested by Maher, or Scholten, considered individually or in combination. Claim 32 specifically recites in part:

storing an analyzed data packet in a memory;
generating a packet descriptor for the analyzed ingress data packet, the packet descriptor containing a reference to a memory location of its analyzed data packet stored in the memory;
placing the packet descriptor in a priority queue corresponding to the priority class of the data packet;
arbitrating and selecting a packet descriptor from among the priority queues using selection logic implementing a queue scheme;
reading a data packet corresponding to the selected packet descriptor from the memory; (Applicant's claim 32, in part, emphasis added)

As shown above, claim 32 specifically recites a method of aggregating using a packet descriptor that contains a reference to a memory location of the analyzed packet stored in the memory. It should be noted that the packet descriptor is generated from analyzing the ingress data packet and is thus separate from and not part of the packet itself. The packet descriptor is placed in a priority queue corresponding to the priority class of the data packet. Further, a data packet corresponding to the selected packet descriptor is read from the memory and the data packets read from the memory are sent to the second processor as an aggregated data stream. Applicant submits that the concept of aggregating input data streams using packet descriptors, as recited in claim 32, is not taught or suggested by Maher or Scholten, considered individually or in combination.

The Office Action asserts that the feature of generating a packet descriptor is disclosed by Maher in col. 9 lines 32-36 and placing of the packet descriptor in a priority queue is taught in col. 10 lines 58-67. Further, the Office Action alleges that the features of arbitrating

and selecting using a packet descriptor is disclosed in Maher in col. 9 lines 47-51 and reading a data packet corresponding to the selected packet descriptor from the memory is disclosed by Maher in col. 9 lines 47-51. Applicant respectfully disagrees.

In col. 9 lines 32-36 Maher describes:

Payload analyzer 110 processes blocks of data from multiple data packets each belonging to a unique traffic flow having an associated session id. In the preferred embodiment of the present invention, payload analyzer 110 processes 64 byte blocks of 64 different data packets from unique traffic flows simultaneously. Each of the 64 byte blocks of the 64 different data flows represents a single context for the payload analyzer. (Maher: col. 9 lines 26-32, emphasis added)

Accordingly, as best understood, a *context*, as used in Maher, is a 64 byte block of a packet belonging to a particular traffic flow. Since the context is a piece of a packet, unlike the packet descriptor recited in claim 32, it is not generated from analyzing an ingress data packet.

Further, the context described in Maher does not contain a reference to a memory location of the analyzed packet stored in the memory, as recited in claim 32.

Further, the arbitrating and selecting is done using the packet descriptors. There appears to be no such teaching in Maher. In Maher, the processing seems to be done using the packets or portions of the packet.

In the "Response to Arguments" section of the Office Action, the Examiner states that the context represents the particular flow of packets and their memory location in the queue engine 302 and that this is generating the packet descriptor for packets in memory. Applicant submits, as described above, that the context is actually a piece of a packet and is thus not generated in the same manner that the packet descriptor is generated as recited in claim 32. Further, there appears to be no teaching in Maher that the context comprises a reference to a memory location of the analyzed data packet, as recited in claim 32.

In light of the above, Applicant submits that the concept of a packet descriptor and its use for aggregating data streams, as recited in claim 32, is not taught or suggested by Maher.

Applicant further submits that the deficiencies of Maher are not cured by Scholten. As best understood, Scholten does not teach a packet descriptor and its use for aggregating data streams as recited in claim 32. Applicant thus submits that even if Maher and Scholten were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not teach or suggest the features recited in claim 32. Applicant thus submits that claim 32 is not rendered obvious by a combination of Maher and Scholten.

Applicant further submits that the dependent claims 33-44 that depend either directly or indirectly from claim 32 are also not rendered obvious by a combination of Maher and Scholten for at least a similar rationale discussed above for claim 32. Applicant submits that the dependent claims are patentable for additional reasons.

Claim 46

Applicant's claim 46 recites:

46. A method for aggregating a plurality of input data streams from first processors into one data stream for a second processor, said method comprising:

receiving an input data stream from each of the first processors, each input data stream formed of ingress data packets, each ingress data packet including priority factors coded therein, each first processor having a corresponding analyzer;

generating an aggregated data stream by analyzing and combining the plurality of input data streams into one aggregated data stream in response to the priority factors, the priority factors including an indication of whether the ingress packet contains protocol data or not, wherein the analyzing comprises, for each first processor, analyzing the input data stream received from the first processor using an analyzer corresponding to the first processor; and

outputting the aggregated data stream to the second processor. (Applicant's claim 46, emphasis added)

Applicant submits that at least the structure of each first processor has a corresponding analyzer that analyzes the input data stream received from the first processor, as recited in claim 46 is not taught or suggested by Maher or Scholten.

The Office Action acknowledges that Maher fails to teach a first processor and second processor being used for sending and receiving data streams, each first processor having a corresponding analyzer, and analyzing the input data stream from the first processor using the corresponding analyzer (Office Action: pg. 13). The Office Action however goes on to assert that these features are taught by Scholten at col. 5 lines 38-48. Applicant respectfully disagrees.

Col. 5 lines 38-48 of Scholten describe the link layer devices depicted in Fig. 2 of Scholten that are connected in a daisy-chain manner. Each link layer device has a data receiver for receiving data and a transmitter for outputting data. A link layer device is configured to divert data packets to virtual channels based upon destination identifiers in the data packets.

Applicant fails to see how these link layer devices teach the features of first processors, with each first processor having a corresponding analyzer wherein the input data stream received from a first processor is analyzed by the corresponding analyzer for generating an aggregated data stream, as recited in claim 46. Even if a link layer device described in Scholten is taken as a first processor recited in claim 46, Applicant submits that Scholten fails to teach anything about an analyzer corresponding to each link layer device that performs analysis to generate an aggregated data stream. Applicant notes that, as best understood, the data receiver of a link layer device is merely a means for receiving data and is not an analyzer as recited in claim 46. There appears to be no teaching in Scholten that the receiver performs analysis for purposes of aggregating data streams, as recited in claim 46.

In the "Response to Arguments" section of the Office Action, the Examiner states that Scholten teaches forwarding packets according to a unique destination identifier associated with a packet and that this is analyzing the packet from the input data stream. Applicant would like to point out that claim 46 recites a specific structure of each first processor has a corresponding analyzer that analyzes the input data stream received from the first processor. Applicant submits that this structure, as recited in claim 46, is not taught by Scholten. The point raised by the Examiner that the packet is analyzed in Scholten does not imply that the structure recited in claim 46 is taught by Scholten.

In light of the above, Applicant submits that the deficiencies of Maher are not cured by Scholten. Applicant thus submits that even if Maher and Scholten were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not teach or suggest the features recited in claim 46. Applicant thus submits that claim 46 is not rendered obvious by a combination of Maher and Scholten.

Claim 47

Applicant's claim 47 recites:

47. A method for aggregating data packets, said method comprising:
receiving an input data stream from a first processor via a first data link having a first bandwidth, the input data stream formed of ingress data packets, each ingress data packet including priority factors coded therein;
generating an aggregated data stream by analyzing and selectively recombining the ingress data packets in response to the priority factors, the priority factors including an indication of whether the ingress packet contains protocol data or not; and
outputting the aggregated data stream to a second processor via a second data link having a second bandwidth, wherein the first bandwidth is greater than the second bandwidth. (Applicant's claim 47, emphasis added)

Claim 47 thus specifically recites that the aggregated data stream is generated by analyzing and selectively recombining the ingress data packets and further that an input data stream is received from a first processor via a first data link having a first bandwidth that is greater than a second bandwidth of a second data link used to output the aggregated data stream to the second processor. Applicant submits that at least these features recited in claim 47 are not taught or suggested by Maher or Scholten, considered individually or in combination.

The Office Action acknowledges that Maher does not teach outputting the aggregated data stream to a second processor via a second data link having a second bandwidth that is smaller than a first bandwidth for receiving an input data stream from a first processor.

The Office Action however asserts that this feature of claim 47 is taught by Scholten at col. 3 lines 47-55, Fig. 3 references 314 and 316, col. 1 lines 53-57, and col. 8 lines 38-50.

Applicant submits that these sections of Scholten do not teach the features recited in claim 47 related to the bandwidths for at least a similar rationale as discussed above for claim 20. Applicant thus submits that the deficiencies of Maher are not cured by Scholten. Applicant thus submits that even if Maher and Scholten were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination does not teach or suggest the features recited in claim 47. Applicant thus submits that claim 47 is not rendered obvious by a combination of Maher and Scholten.

Examiner's response in the "Response to Arguments" section of the Office Action fails to mention anything about the bandwidths-related features, as recited in claim 47.

Claim 48

Applicant submits that claim 48 is not rendered obvious by a combination of Maher and Scholten for at least a similar rationale as discussed above for claims 20 and 47.

Additionally, as discussed above with respect to claim 32, Applicant submits that the concept of a "*packet descriptor*", as recited in claim 48 (and in claim 32), is also not taught or suggested by a combination of Maher and Scholten. Applicant submits that this is an additional reason for the allowability of claim 48 over a combination of Maher and Scholten.

Claims 50-62

Applicant submits that claim 50 is allowable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 32.

Applicant further submits that the dependent claims 51-62 that depend either directly or indirectly from claim 50 are also not rendered obvious by a combination of Maher and Scholten for at least a similar rationale discussed above for claim 50. Applicant submits that the dependent claims are patentable for additional reasons.

Claim 64

Applicant submits that claim 64 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 46.

Claim 65

Applicant submits that claim 65 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claims 20 and 47.

Claim 66

Applicant submits that claim 66 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claims 20 and 47. Additionally, Applicant submits that claim 66 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 32.

Claim 67

Applicant submits that claim 67 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 31.

Claim 68

Applicant submits that claim 68 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 46.

Claim 69

Applicant submits that claim 69 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claims 20 and 47.

Claim 70

Applicant submits that claim 70 is patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claims 20 and 47. Additionally, Applicant submits that claim 70 is also patentable over a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 32.

Claim 16

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maher in view of Scholten and further in view of Manaka et al (U.S. Patent No. 6,421,352) (hereinafter "Manaka").

Claim 16 depends from claim 1 and is thus not rendered obvious by a combination of Maher and Scholten for at least the reasons discussed above for claim 1. Further, Applicant submits that the deficiencies of Maher and Scholten are not cured by Manaka, considered individually or in combination. Manaka has been cited for specific teachings and does not teach the features of claim 1 discussed above that make claim 1 patentable over Maher. Accordingly, even if Maher, Scholten, and Manaka were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not render claim 16 obvious.

Claims 17 and 49

Claims 17 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maher in view of Scholten and further in view of Abbas et al (U.S. Patent No. 6,810,046) (hereinafter "Abbas").

Applicant submits that claims 17 and 49 are not rendered obvious by a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 1. Further, Applicant submits that the deficiencies of Maher and Scholten are not cured by Abbas. Abbas is cited by the Office Action for a very specific teaching and does not teach the

elements of claims 17 and 49. Accordingly, even if Maher, Scholten, and Abbas were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not render claims 17 and 49 obvious.

Claims 19, 45, and 63

Claims 19, 45 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maher in view of Scholten and further in view of Mackiewich et al (U.S. Patent No. 7,212,536) (hereinafter "Mackiewich").

Applicant submits that claim 19, which depends from claim 18, is not rendered obvious by a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 18. Further, Applicant submits that the deficiencies of Maher and Scholten are not cured by Mackiewich. Mackiewich is cited by the Office Action for a very specific teaching and does not teach the features of claim 18 discussed above that make claim 18 patentable over a combination of Maher and Scholten. Accordingly, even if Maher, Scholten, and Mackiewich were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not render claim 19 obvious.

Applicant submits that claim 45, which depends from claim 32, is not rendered obvious by a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 32. Further, Applicant submits that the deficiencies of Maher and Scholten are not cured by Mackiewich. Mackiewich is cited by the Office Action for a very specific teaching and does not teach the features of claim 32 discussed above that make claim 32 patentable over Maher. Accordingly, even if Maher, Scholten, and Mackiewich were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not render claim 45 obvious.

Applicant submits that claim 63, which depends from claim 50, is not rendered obvious by a combination of Maher and Scholten for at least a similar rationale as discussed above for claim 50. Further, Applicant submits that the deficiencies of Maher and Scholten are not cured by Mackiewich. Mackiewich is cited by the Office Action for a very specific teaching

and does not teach the features of claim 50 discussed above that make claim 50 patentable over Maher. Accordingly, even if Maher, Scholten, and Mackiewich were combined as suggested by the Office Action (even though there appears to be no motivation for the combination), the resultant combination would not render claim 63 obvious.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

/Sujit B. Kotwal/

Sujit B. Kotwal
Reg. No. 43,336

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
Attachments
SBK:m4g
61410949 v1